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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,487	06/18/2001	Jin-Ho Park	5649-608DV	5097

20792 7590 11/12/2002

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EXAMINER

PIZIALI, JEFFREY J

ART UNIT PAPER NUMBER

2673

DATE MAILED: 11/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/884,487

Applicant(s)

PARK, JIN-HO

Examiner

Jeff Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/130,005.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Farrington et al. (US 5,325,283).

Regarding claim 10, Farrington discloses a multiple DC output voltage DC/DC converter comprising: a transformer [Fig. 2, 10] including a primary coil and a secondary coil that are coupled to one another by magnetic induction; and a switch [Fig. 2, Q2] that is connected to the primary coil and that controls current switching therein; wherein a first DC output voltage [Fig. 2, at C<sub>IN</sub>] of the multiple DC output voltage DC/DC converter is generated from the primary coil and a second DC output voltage [Fig. 2, at S<sub>3</sub> & S<sub>4</sub>] of the multiple DC output voltage DC/DC converter is generated from the secondary coil (see Column 2, Line 53 - Column 3, Line 16).

Regarding claim 11, Farrington discloses a first rectifier [Fig. 2, D2 & C2] and a second rectifier [Fig. 2, D5 & CF], wherein the primary coil is connected between an input voltage and the switch, wherein the first rectifier is connected to the primary coil to generate the first DC output voltage of the multiple DC output voltage DC/DC converter therefrom and wherein the second rectifier is connected to the secondary coil to generate the second DC output voltage of

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the multiple DC output voltage DC/DC converter therefrom (see Column 2, Line 53 - Column 3, Line 16).

Regarding claim 12, Farrington discloses the first rectifier comprises a first diode [Fig. 2, D2] and a first capacitor [Fig. 2, C2] and wherein the second rectifier comprises a second diode [Fig. 2, D5] and a second capacitor [Fig. 2, CF] (see Column 2, Line 53 - Column 3, Line 16).

Regarding claim 13, Farrington discloses an inductor [Fig. 2, LM] that is coupled across the primary coil, wherein the first DC output voltage of the multiple DC output voltage DC/DC converter is generated from the primary coil and from the inductor (see Column 2, Line 53 - Column 3, Line 16).

Regarding claim 14, this claim is rejected under the reasoning applied in the above rejection of claims 10 and 13.

Regarding claim 15, this claim is rejected under the reasoning applied in the above rejection of claim 11.

Regarding claim 16, this claim is rejected under the reasoning applied in the above rejection of claim 12.

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Regarding claim 17, Farrington discloses an input voltage port [Fig. 2, at Q1 & Q2] that is connected to the primary coil to provide a DC input voltage [Fig. 2, at C1 & C2] to the primary coil (see Column 2, Line 53 - Column 3, Line 16).

Regarding claim 18, this claim is rejected under the reasoning applied in the above rejection of claim 17.

### *Response to Arguments*

3. Applicant's arguments filed August 30, 2002 have been fully considered but they are not persuasive. The applicant contends the prior art of Farrington et al. (US 5,325,283) does not teach a multiple DC output voltage DC/DC converter. The examiner respectfully disagrees. Farrington discloses a first DC output voltage [Fig. 2, at C<sub>IN</sub>] of the multiple DC output voltage DC/DC converter is generated from the primary coil and a second DC output voltage [Fig. 2, at S<sub>3</sub> & S<sub>4</sub>] of the multiple DC output voltage DC/DC converter is generated from the secondary coil (see Column 2, Line 53 - Column 3, Line 16). There are clearly and inherently voltages generated across the above cited circuits when Farrington's converter is in operation.

The applicant additionally contends Figure 2 of Farrington et al. does not include a diode D<sub>2</sub>. The examiner respectfully disagrees. Although Figure 2 does neglect to explicitly label the diode 'D<sub>2</sub>,' Farrington clearly illustrates a diode between switch Q2 and capacitor C2 (see Fig. 2). By such reasoning, rejection of claims 10-18 is deemed proper and thereby maintained.

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*Conclusion*

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

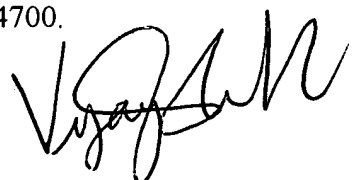
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (703) 305-8382. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



November 5, 2002

  
**VIJAY SHANKAR**  
**PRIMARY EXAMINER**